

## ECUADORIAN BIRDS: SOME NESTING RECORDS AND EGG DESCRIPTIONS

by Harold F. Greeney

While visiting Ecuador, one cannot help but be amazed at the diversity and beauty of the avifauna. Of the over 1,600 species of birds recorded from Ecuador, many are among the most flashy and beautiful in the world. At a time when tropical forests are disappearing at an ever increasing rate, the need for detailed ecological and behavioural studies is urgent. Only with a good understanding of species' behaviour and ecological needs can we hope to develop effective methods of conservation. Simple observations of seemingly trivial details such as nest construction and breeding dates, provide enormously valuable data that can be used by conservationists and ornithologists alike. The following nest records represent fairly common species, that are nevertheless threatened by the destruction of their habitat. All observations were made during field work on the natural history of tropical butterflies and other insects, but the excitement of exploring the behaviour of these beautiful birds could not be ignored.

### **White-sided Flower Piercer *Diglossa albilatera***

San Isidro Ranch, Napo Providence, near Cosanga, elevation 1,700 m (approx. 5,600ft).

On December 18th 1996 a male and female were observed visiting a nest located approximately 10m (approx. 32ft) from the forest edge in a grassy field. The nest was an open grassy cup, about 50cm (almost 1ft 8in) above the ground, built in thick *Paspalum* sp. (Poaceae) grass shaded by ferns (Thelypteridaceae) and blackberries (Rosaceae: *Rubus* sp.). One nestling was found in the nest.

### **Rufous-collared Sparrow *Zonotrichia capensis***

San Isidro Ranch, Napo Providence, elevation 1,700m (approx. 5,600ft).

On December 10th 1996, a nest, similar to those described by Stiles and Skutch (1989), was discovered in low vegetation in the middle of a cattle pasture. Three eggs were in the nest. When the nest was visited on December 18th 1996, all of the eggs had hatched.

### **Lemon-rumped Tanager *Ramphocelus icteronotus***

Mindo, Pichincha Providence, elevation 1,400m (approx. 4,600ft).

On December 13th 1996 a lone female was observed building a nest about 4m (approx. 13ft) up in a citrus tree (Rutaceae) in an area of disturbed forest.



**Long-billed Gnatwren *Ramphocaenus melanurus***

La Selva Lodge, Sucumbios Providence, 75km (approx. 46 miles) e.s.e. of Coca, elevation 250m (approx. 800ft).

On January 7th 1998 a nest was encountered beside a heavily travelled trail inside primary rainforest. The nest was similar to that described in Stiles and Skutch (1989) and was located approximately 30cm (1ft) above the ground, wedged in between the leaf axils of a small Cyclanthaceae palm. The small, cup-like nest was constructed of tightly woven palm fibres and small twigs. Two eggs were found. Both were white with a pale reddish tinge and red-brown speckling, heaviest at the broad end. When disturbed from the nest, the adult would fly only a short distance away and remain, just out of sight until I left at which time it would return immediately to the nest.

**Ruddy Quail Dove *Geotrygon montana***

La Selva Lodge, Sucumbios Providence, 75 km (approx. 46 miles) e.s.e. of Coca, elevation 250m (approx. 800ft).

In early January 1998 two separate nests were located within primary forest habitat. While other authors have indicated that these birds likely nest on the ground (Howell and Webb, 1995), both of these were located approximately 1m (3ft 3in) above the ground and consisted of a loosely arranged platform of leaves and sticks. One was located in the crotch of a small tree, and the other was in on a tangle of branches and vines that formed at rough 'Y' shape. Each nest contained two buff-coloured eggs. The nest and eggs were similar to those described for this species from other areas (Stiles and Skutch, 1989). Adults would remain on the nest until the observer was closer than 2m (approx 6ft).

**Wedge-billed Woodcreeper *Glyphorhynchus spirurus***

La Selva Lodge, Sucumbios Providence, 75km (approx. 46 miles) e.s.e. of Coca, elevation 250m (approx. 800ft).

On January 31st 1998 a single nest was located about 2m (approx. 6ft) up inside a small cavity in the side of a tree. This is similar to the nesting situations described from other locations (Stiles and Skutch, 1989; Wetmore, 1972). The tree was located inside primary forest habitat, but was immediately adjacent to the trail. It was difficult to see the nest itself, as the hole was only 8cm (approx. 3¼ in) diameter and the hole was 15cm (6in) deep. The hole was located on the side of the tree but the cavity was oriented vertically. Two pale coloured eggs were present but were not removed for fear of damaging them. The adult woodcreeper would remain quietly on the nest until the observer's face was only centimetres from the opening and then burst out, at which point it would fly out of sight.



The importance of observing and publishing all aspects of bird behaviour, biology, reproduction, and distribution has never been so crucial. The destruction of our world's forests and other habitats is increasing at an alarming rate. It is the hope of the author that more ornithologists and amateur birdwatchers alike will make known even the smallest observations of species in the field. One never knows when they may be adding a crucial link to the understanding of a species' biology, and aiding in its conservation.

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### References

- Howell, S.N.G. & Webb, S. (1995). *A guide to the birds of Mexico and Northern Central America*. Oxford University Press Inc., New York.
- Stiles, F.G. & Skutch, A.F. (1989). *A guide to the birds of Costa Rica*. Cornell University Press, Ithaca, New York.
- Wetmore, A. (1972). *The birds of the Republic of Panama*. Part 3. Passeriformes: Dendroclaptidae (Woodcreepers) to Oxyruncidae (Sharpbills). Smithsonian Misc. Coll. Vol. 150, Part 3. Smithsonian Institution Press, Washington D.C.

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## IRON CONTENT OF RAMPHASTID DIETS

by Adrian Fowler, Liz Glen & Mike Kitcherside

One of the major causes of mortality in Ramphastids is haemochromatosis - iron storage disease. Currently, this condition is controlled by dietary management. Low-iron foods have become the focus of considerable attention, with several companies manufacturing diets to meet this specific requirement. The results of laboratory analysis of foods by Bristol Vet School are presented in the following table. It has been recommended that the diets of susceptible softbills should contain less than 40 ppm of iron.

Ramphastids are frugivores and, although we do not yet have the results for fruits, it is likely that most fruits are low in iron. The limited voluntary food intake precludes the exclusive use of fruits because the higher energy demands of outdoor housing cannot be met without the use of a nutrient-dense ration. Meat contains high levels of iron, in a form that is more readily absorbed than plant or mineral sources, and the common practice of feeding canine diets is to be discouraged. Vitamin and mineral premixes invariably contain high levels of iron and previous studies have shown even simple calcium supplements to contain as much as 11,000ppm.

Tannins chelate iron and thereby reduce its absorption. Water sources in the tropical rainforests of Central and South America are reportedly high in tannins and it may be that toucans in captivity are susceptible to iron overload because of a genetic adaptation to tannin-complexed iron. Captive birds rapidly become accustomed to the addition of dilute tea to the drinking water but this supplement is not without its problems. Tannins also reduce food intake and protein digestion, and caffeine is both a stimulant and diuretic.

One collection reported the use of clays as a potential means of controlling iron absorptions. We analysed two clay samples that were claimed to be similar in composition to deposits located in Ecuador. The iron content of these was exceptional. It is highly likely that more iron would be released into the intestine as a result of administering the clay than would be beneficially bound from the remainder of the diet.

All soils are likely to be high in iron and Ramphastids frequently swallow samples, either intentionally or inadvertently with food. In relation to the potential iron-intake by this route, low iron diets may be of little significance in controlling the problem.

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